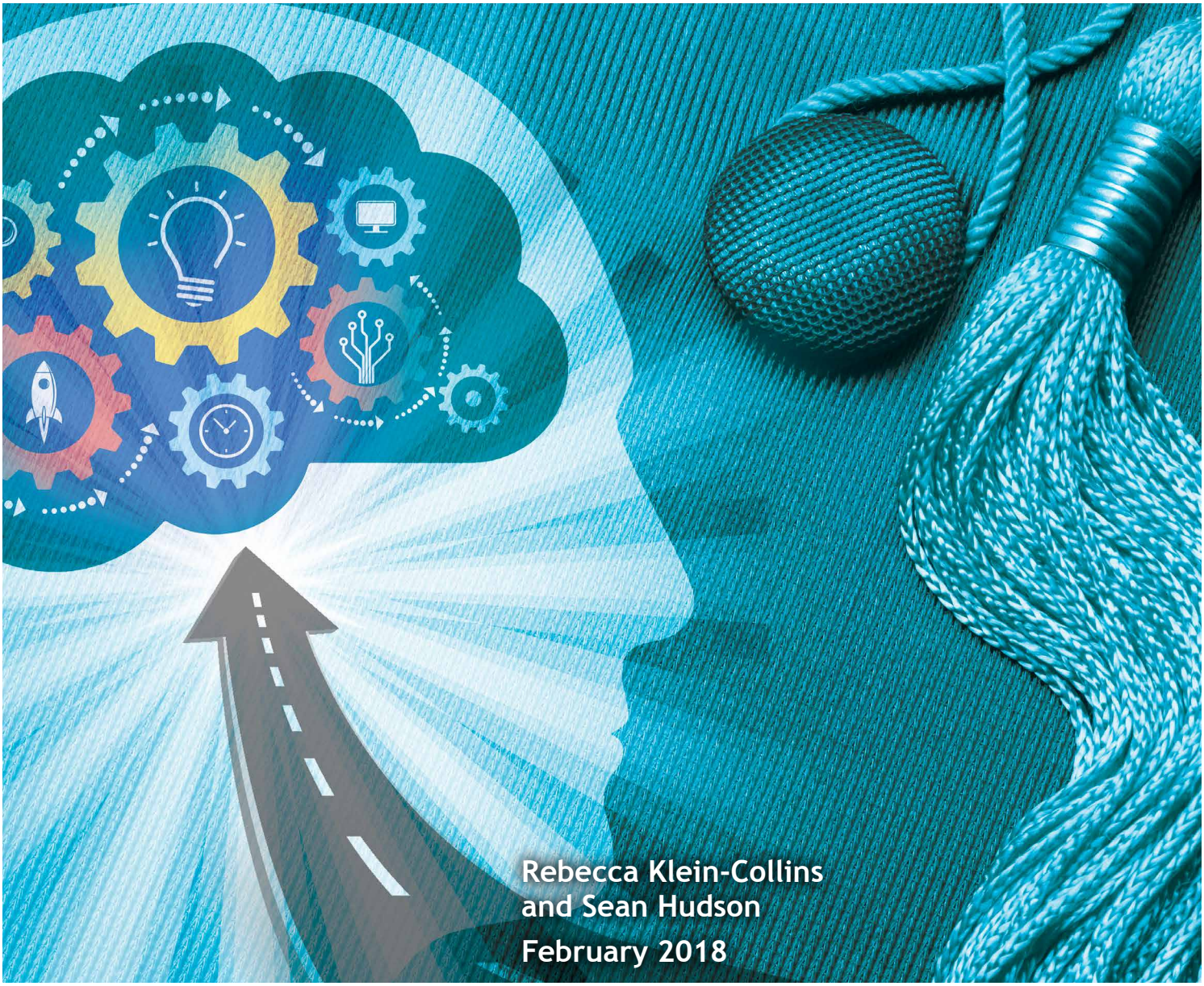
CAEL
Linking Learning and Work

Do Methods Matter?
PLA, Portfolio Assessment, and the Road to Completion and Persistence

A Study of Prior Learning Assessment and Adult Students' Academic Outcomes at Four LearningCounts Partner Colleges



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The primary investigators and authors of this report were Rebecca Klein-Collins, Associate Vice President of Research and Policy Development, and Sean Hudson, Senior Research Associate. Guidance and support were provided by CAEL's LearningCounts team: Beth Doyle, Kristen Himmerick, Mary-Celeste Slusser, and Katrina Douthit. Additional feedback was provided by CAEL's Pamela Tate, Joel Simon, Angela Gallagher, and Tucker Plumlee.

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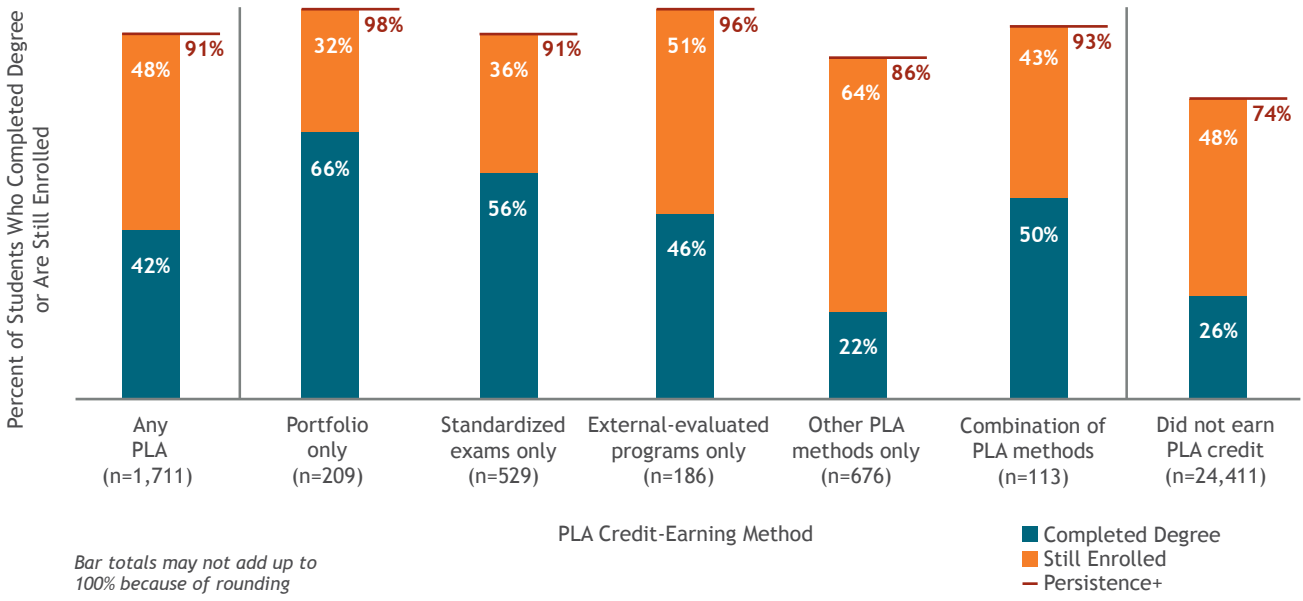
EXECUTIVE SUMMARY

The Council for Adult and Experiential Learning (CAEL) has conducted several studies on the relationship between prior learning assessment (PLA) and adult student outcomes. Our studies, along with those by other researchers, have consistently found that adult students with PLA credit are more likely to earn a postsecondary degree than similar students with no PLA credit (Klein-Collins, 2010; Hayward & Williams, 2015; McKay, Cohn, & Kuang, 2016; Klein-Collins & Hudson, 2017).

This report presents the findings of a new study that examines the relationship between PLA and student outcomes, while also exploring whether students might have different outcomes depending upon the specific method of PLA that they are using. To understand whether PLA is associated with better student outcomes, we analyzed data on degree completion and persistence+ (i.e., students who completed a degree or were still enrolled). Consistent with previous findings, we found that students with PLA credit persist and complete their degrees at higher rates, compared to students with no PLA credit. An additional examination of students' outcomes by individual PLA methods suggests that some methods of PLA may be associated with higher degree completion and persistence than others — particularly portfolio assessment and standardized exams. These findings are, however, more suggestive than conclusive due to relatively small sample sizes, short time horizons of the students in the sample, varying institutional PLA practices, and varying student characteristics. Further research will be needed to understand the role of these other factors and the true impact of the different methods of PLA.

Figure A.
Persistence+ (Degree Completion or Continued Enrollment) by PLA Credit-Earning Method



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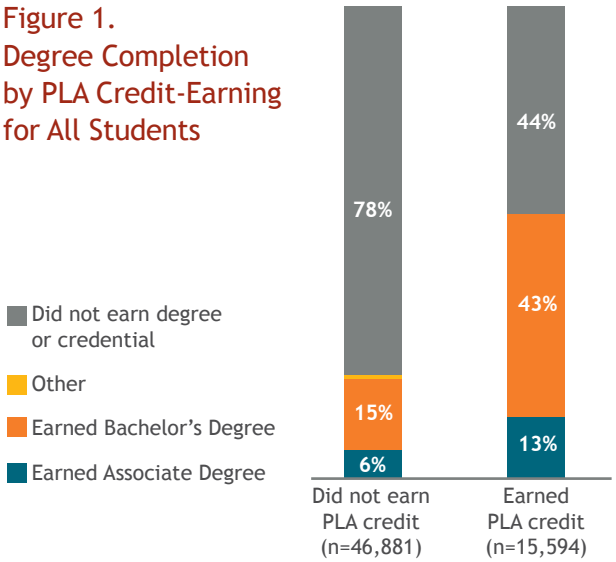
INTRODUCTION

Many adults come to their postsecondary experience having already gained a wealth of college-relevant learning that they acquired through work experiences, employer training programs, volunteer work, self-study, or military training and experiences. Colleges can choose to recognize this learning — and have it count towards degree requirements — through various forms of prior learning assessment (PLA). Earning college credit through PLA can save these adult students both time and tuition dollars in earning a degree. PLA advocates further believe that such credit may play a motivational role, encouraging adults to persist towards degree completion.

The Council for Adult and Experiential Learning (CAEL) has conducted several studies of the relationship between PLA and adult student outcomes. In 2010, for example, CAEL's *Fueling the Race to Postsecondary Success: A 48-Institution Study of Prior Learning Assessment and Adult Student Outcomes* presented findings showing that adult students with PLA credit were two and a half times more likely to earn a postsecondary degree than similar students with no PLA credit (Klein-Collins, 2010). More recently, CAEL examined the adult students participating in our own LearningCounts™ program, which is an online portfolio assessment service. The study found that LearningCounts students who successfully earned credit through the program's standardized portfolio assessment process were more likely to persist and/or complete their degrees compared with similar students who did not earn such credit. We also found that LearningCounts students had better academic outcomes compared to the cohort of all adult students who attended the same colleges and universities during the same time period (Klein-Collins & Hudson, 2017). Other organizations that have conducted similar studies have also found that students using PLA have better outcomes in terms of degree completion or persistence than students without PLA credit (Hayward & Williams, 2015; McKay, Cohn, & Kuang, 2016)(Figure 1).

Figure 1.
Degree Completion by PLA Credit-Earning for All Students



This CAEL report presents findings from another approach to examining the academic outcomes of LearningCounts students. In partnership with four LearningCounts institutions, CAEL examined the academic records of the adult learners at those institutions and compared the outcomes of students who earned LearningCounts portfolio credits, students who earned credit through other PLA methods, and students who had no PLA credit. The results of this study are consistent with previous findings, showing that students with PLA credit persist and complete at higher rates. A high-level examination of students' outcomes by individual PLA methods suggests that some methods of PLA may be associated with higher degree completion than others, most notably portfolio assessment and standardized exams. However, these results require further study given that student characteristics and institutional policies and practices may also be contributing significantly to these outcomes.

OUR APPROACH

WHAT IS PRIOR LEARNING ASSESSMENT?

Prior learning is a term used by educators to describe learning that a person acquires outside of a traditional academic environment. This learning may have been acquired through work experience, employer training programs, independent study, non-credit courses, volunteer or community service, travel, or non-college courses or seminars.

Prior learning assessment (PLA) is a term used to describe the process by which an individual's experiential learning is assessed and evaluated for purposes of granting college credit, certification, or advanced standing toward further education or training. There are four generally accepted approaches to PLA and, when properly conducted, all ensure academic quality: (1) national standardized exams in specified disciplines, e.g., Advanced Placement (AP) exams, College Level Examination Program (CLEP) tests, Excelsior College Exams (UExcel), Dantes Subject Standardized Tests (DSST); (2) challenge exams for institutional courses; (3) individualized assessments, particularly portfolio-based assessments such as those conducted by colleges and CAEL's LearningCounts national on-line service; and (4) evaluated non-college programs, e.g., the National College Credit Recommendation Service (NCCRS) or American Council on Education's ACECREDIT service and evaluations of corporate training and military training.

For this analysis, we examined the academic records of 26,122 students age 25 or older who attended one of four partner colleges, known as Featured Network Institutions. Each of the Featured Network Institutions joined LearningCounts at different times, with start dates ranging from February 2011 to August 2014. The end date for the period examined in this study was December 2016. Of the four participating institutions, three are private four-year institutions and one is a public four-year institution.

Featured Network Institutions are colleges and universities that use LearningCounts to help their adult students earn credit for what they know through a portfolio development course and individual portfolio assessment.

The sample consisted of all adult students at participating institutions, both PLA credit-earners and non-PLA credit-earners. A small percentage of the sample (1,711 of the 26,122 students, or 7%) had earned college credit through any method of PLA (including portfolio assessment, standardized exams, externally evaluated programs such as those through ACE/NCCRS credit recommendation processes, and internally evaluated programs). We examined degree completion rates and persistence patterns for students without PLA credit compared to students with any PLA credit; we also examined the academic success of students based on the method of PLA that was used. We further examined these outcomes based on the number of years a student was enrolled at that institution, so that the effect of PLA credit-earning could be examined within cohorts of students who had the same amount of time to progress towards their degrees.

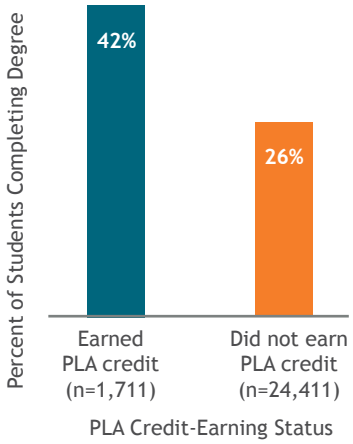
THE FINDINGS: DEGREE COMPLETION AND PLA

Overall, we found that students with PLA credit were more likely to complete a degree or credential compared to students without such credit, which aligns with the results of previous PLA research. Of all adult students with any PLA credit in our sample, 42% had earned a degree or other postsecondary credential (primarily bachelor's degrees) by the end of 2016, compared to only 26% of non-PLA students (Figure 2).

When examining degree completion by method of PLA, we found that the highest rates of degree completion were among adult students with PLA credit earned solely through portfolio assessment (66%), followed by students with PLA credit earned solely through standardized exams like CLEP or DSST (56%). The next highest (50%) were students who earned PLA credit through a combination of methods (i.e., portfolio plus CLEP, or portfolio plus credit for programs evaluated by external parties like ACE or NCCRS) (Figure 3 shows a comparison of the graduation rates for all PLA, individual methods, and non-PLA earners).

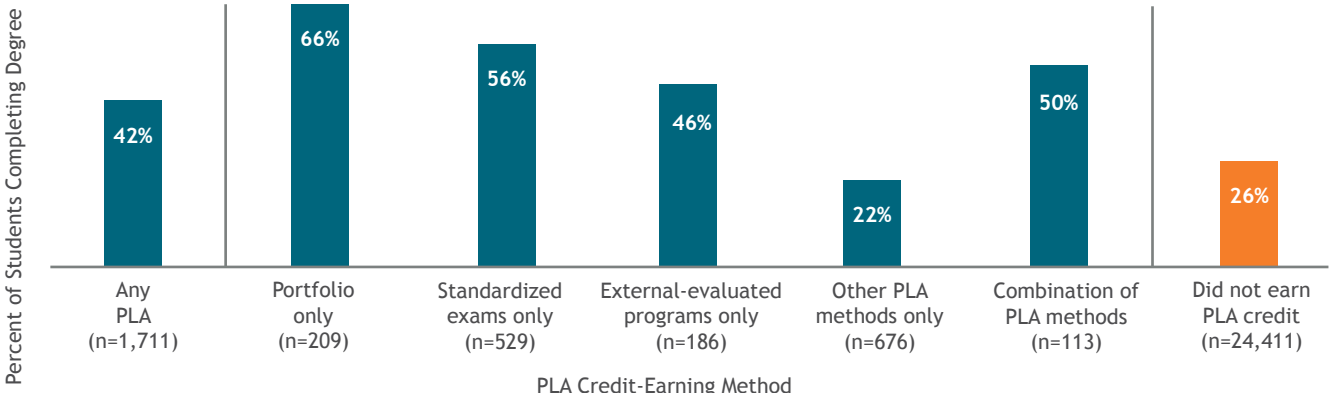
Outside of the above methods, institutions may offer other opportunities for earning PLA credit such as awarding credit for industry licenses following a formal review of the training programs for those licenses and the associated learning outcomes and competencies. In our sample, students who only earned PLA credit through these alternative forms had the lowest rate of degree completion at 22%.

Figure 2. Degree Completion by PLA Credit-Earning for All Students



It is important to note that these degree completion rates are based on an examination of a limited period of enrollment. With many of these adult students enrolled only part-time, they will require a longer period to complete a degree. Many of the students who are shown as having not earned a degree may still be enrolled, as discussed in the section on persistence.

Figure 3.
Degree Completion by PLA Credit-Earning Methods for All Students



Time-Based Cohort Analysis for Degree Completion

The students in our sample matriculated at different times, so students had widely ranging amounts of time during which to earn college credits and complete degrees before the end date of the period this study examined. Some students had just one year of study following matriculation while others had as many as seven years. Therefore, this study also examines student outcomes based on the number of years a student was enrolled at that institution, so that the effect of PLA credit-earning could be examined within cohorts of students who had the same amount of time to progress towards their degrees.

When examining the relationship between PLA credit-earning and student academic success by matriculation year, the data show that within each time-based cohort, students with PLA had higher rates of degree completion compared to students with no PLA credit. For example, for the cohort of 1,994 students with 5 years of study following matriculation, 72% of PLA students had earned a degree compared with 38% of students without PLA credit (Figure 4).

The data show that, over time, there is a consistent rise in degree completion for both PLA students and non-PLA students. This is to be expected as any student will benefit from having additional time to complete their degree regardless of whether they earn PLA credit. However, the gap in degree completion between PLA students and non-PLA students shows a widening trend as the number of years of study following matriculation increases. By 7 years of study following matriculation, there is a 25% percent gap in degree completion between PLA and non-PLA students — 88% and 63%, respectively.

We also controlled for time in the analysis of degree completion for students utilizing the different methods of PLA. The data show that even when allowing for additional time to complete a degree, students using portfolio assessment and standardized exams still had higher rates of degree completion, compared to students using other methods (Figure 5a & Figure 5b). Of the students enrolled for three years or more, those with credit through portfolio assessment had a degree completion rate of 74%, and those with credit from standardized exams had a degree completion rate of 72%. In comparison, students using other methods had lower graduation rates (36-69%) (Figure 5b).

Figure 4.
Degree Completion by PLA Credit-Earning and Number of Years Since Matriculation at Institution

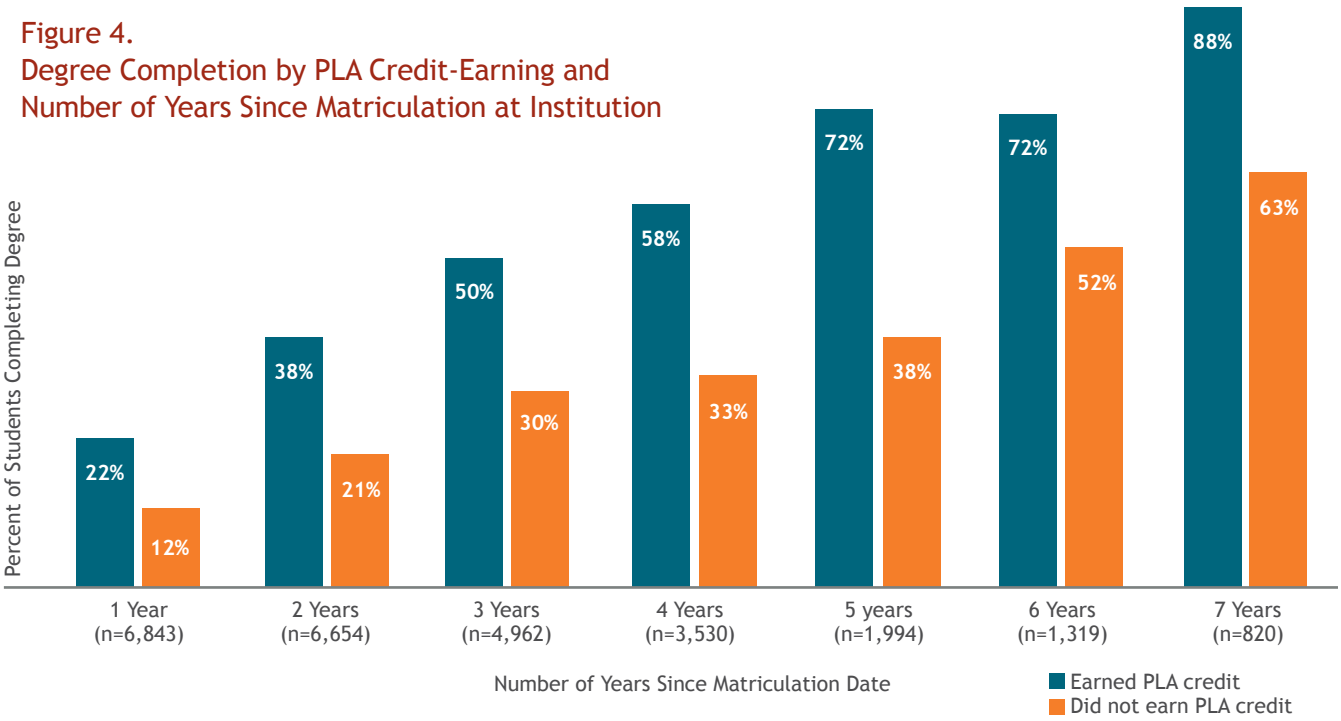


Figure 5a.
Degree Completion by PLA Credit-Earning Method based on 1-2 Years Since Matriculation at Institution

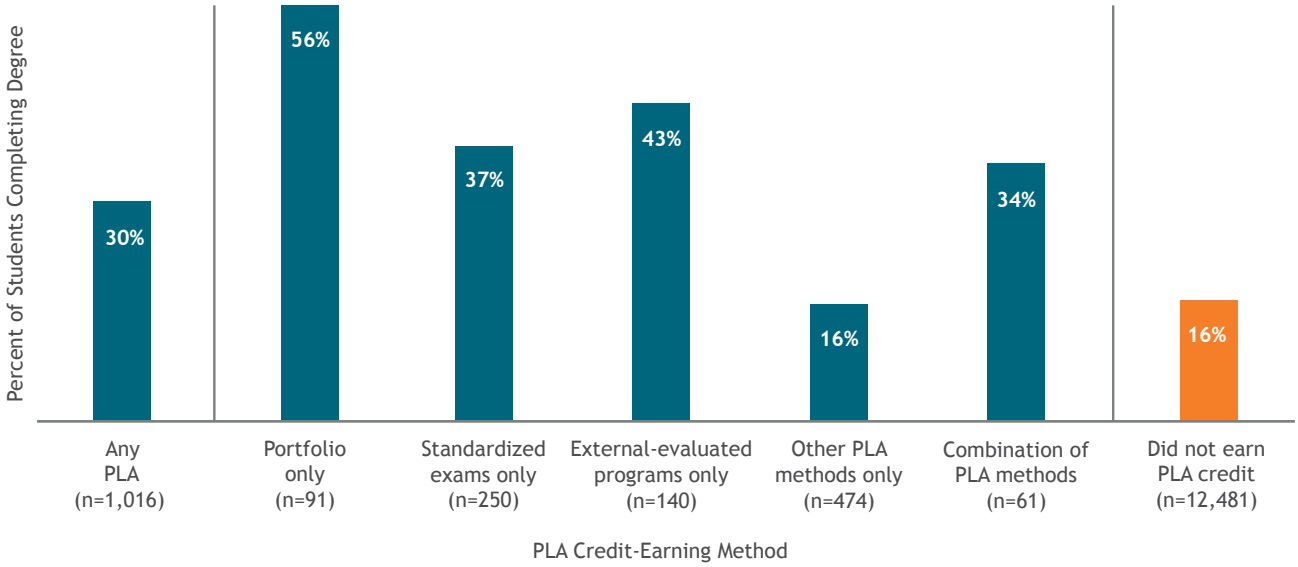
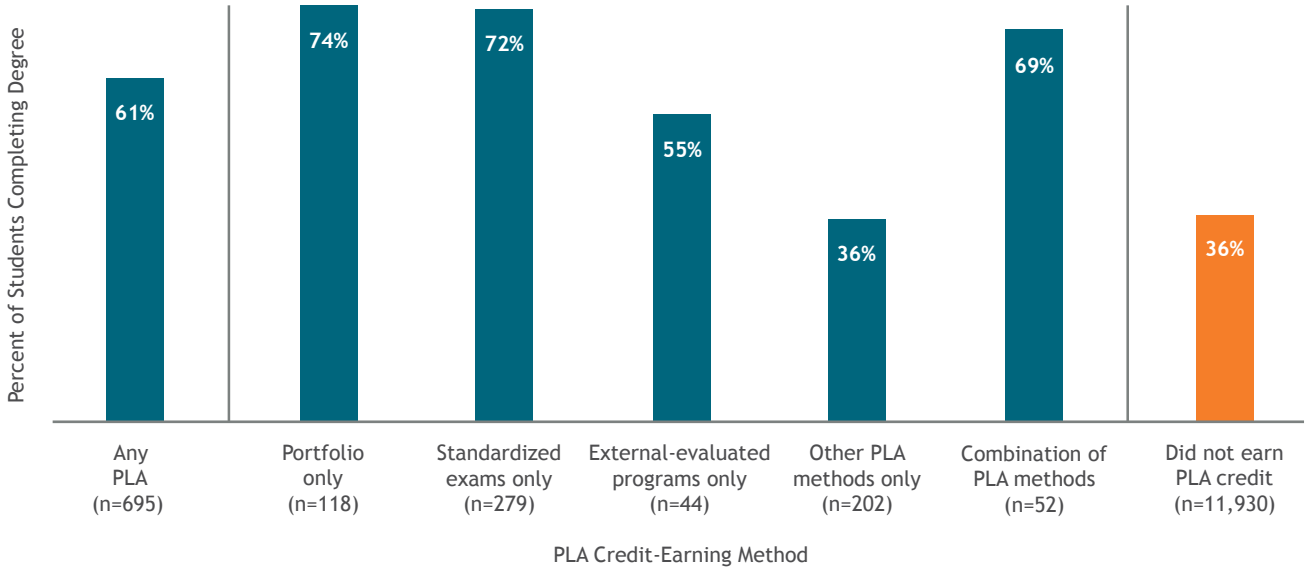


Figure 5b.
Degree Completion by PLA Credit-Earning Method based on 3 Years or More Since Matriculation at Institution



FINDINGS: PERSISTENCE+ AND PLA

WHAT IS PERSISTENCE+?

A common definition of persistence is continued student enrollment from the first year (or term) to the second year (or term) of a degree program. This is not a meaningful metric for adult learners who usually attend school part-time, often have transfer credits, and may need to periodically stop out of a program for personal, financial, or professional reasons.

In this study, we use a different kind of metric that we are calling persistence+, which takes the adult learner into account by defining persisting students as those who either completed a degree or were enrolled within the 3 most recent terms of our analysis period.

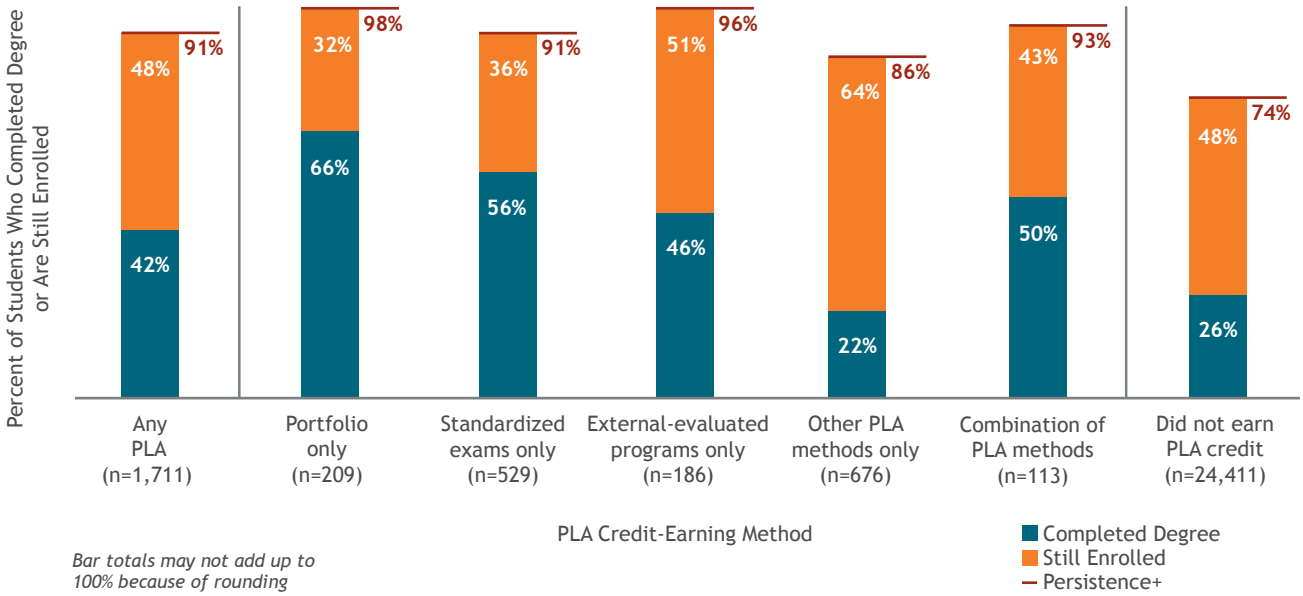
Given that we examined a relatively short time period of enrollment for the students in our sample, we recognize that many students who have not yet earned a degree may still be enrolled and continuing their progress. A bachelor's degree takes considerably longer than four years to complete for part-time, adult students, even if they earn additional credit through PLA.

To account for this, we examined overall student persistence. Researchers often count students as "persisting" if they continue their enrollment from the first year to the second year of a degree program. That definition is not meaningful for adult learners who usually attend part-time, often have transfer credits, and may need to periodically stop out of a program for personal, financial, or professional reasons. Instead, what this study is examining is more akin to persistence over time, with successful persistence defined as either degree completion or continued enrollment. For the purposes of this study, we counted students as having continued enrollment if they were enrolled any time during the 3 most recent terms of our analysis period. Since this definition of persistence differs from the normal definition of persistence, we are using the term persistence+.

Students earning PLA credit showed better rates of persistence+ compared to students who did not earn PLA credit.

Overall, we found that 90% of students who earned PLA credit had better persistence+ (42% degree completion and 48% continued enrollment) compared to only 74% of students who did not earn PLA credit (26% degree completion and 48% continued enrollment). There is some variation of persistence+ for the different methods of PLA, but those differences are less pronounced than for degree completion on its own (Figure 6).

Figure 6.
Persistence+ (Degree Completion or Continued Enrollment) by PLA Credit-Earning Method



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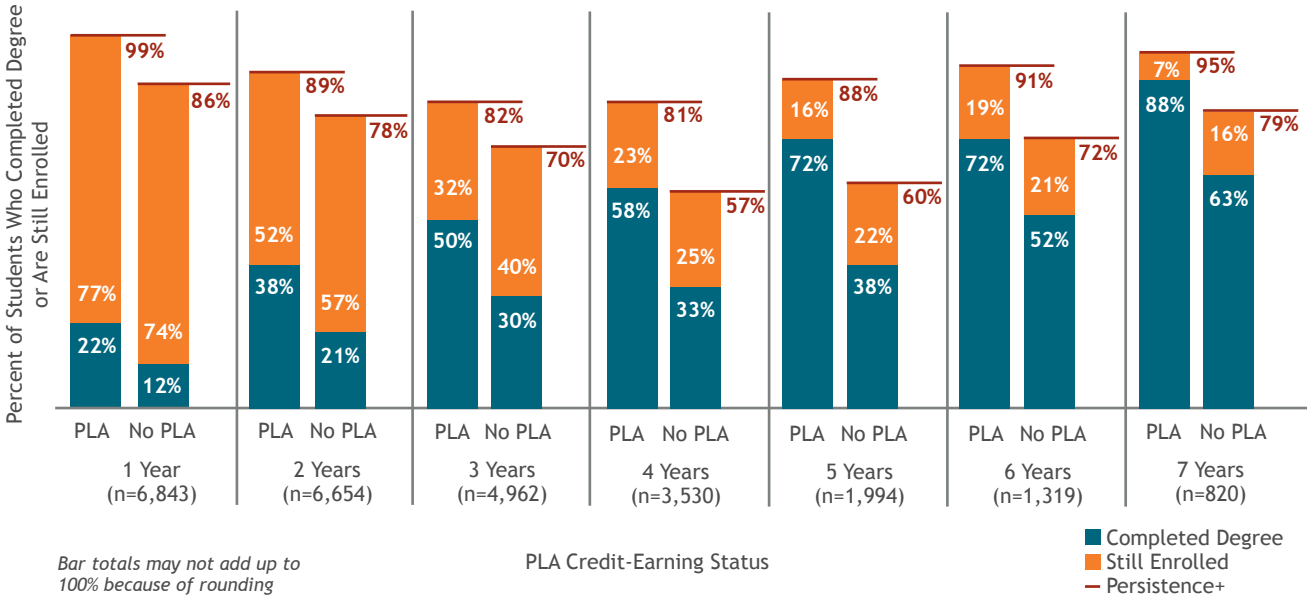
Time-Based Cohort Analysis for Persistence+

We also examined persistence+ for students using time-based cohorts (groups of students who matriculated in the same year). The results show that in each time-based cohort, the students with PLA credit have a higher persistence+ rate than students without PLA. For example, for students matriculating 6 years ago, 91% of the PLA credit-earning students have a positive outcome of either degree completion or continued enrollment compared to only 73% of students with no PLA credit (Figure 7).

Figure 7.
Persistence (Degree Completion or Continued Enrollment) by PLA Credit-Earning and the Number of Years Since Matriculation at Institution



Bar totals may not add up to 100% because of rounding

Persistence+ by PLA Method

The above findings show a relatively strong positive relationship between PLA credit-earning and persistence+. However, just because a student has not yet completed a degree does not mean that he or she has a negative outcome. In many cases, the student is still enrolled and working toward their degrees.

An analysis of persistence+ for the various methods of PLA within time-based cohorts does not suggest much difference in outcomes, with the one exception being lower persistence for students who matriculated at least three years previously and earning "other" PLA credit (Figures 8a and 8b).

Figure 8a.
Persistence+ (Degree Completion or Continued Enrollment) by PLA Credit-Earning Method based on 1-2 Years Since Matriculation at Institution

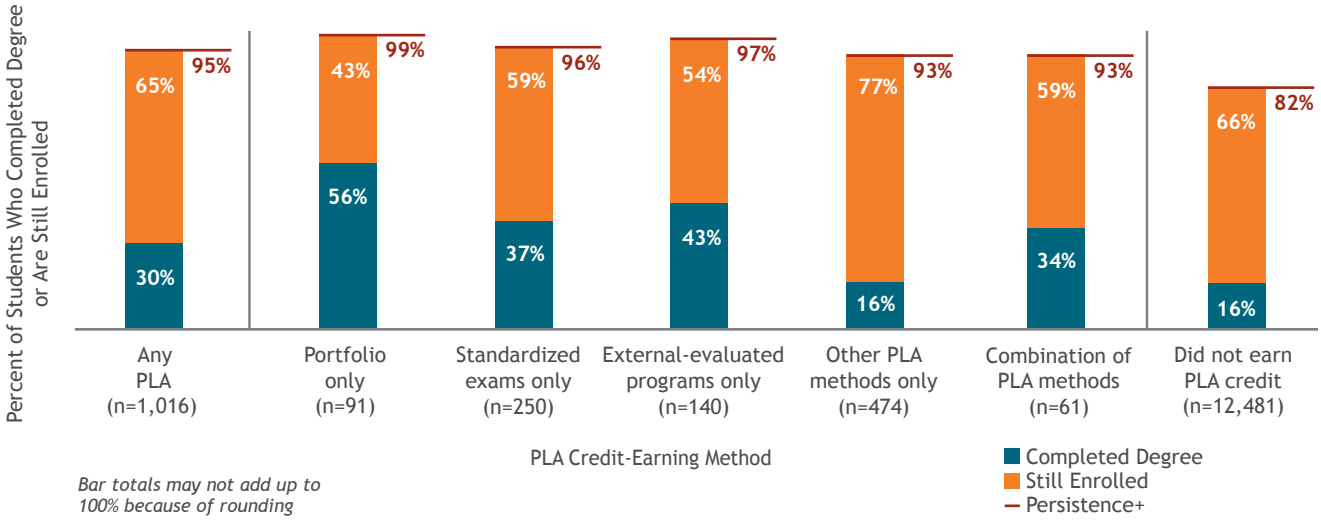


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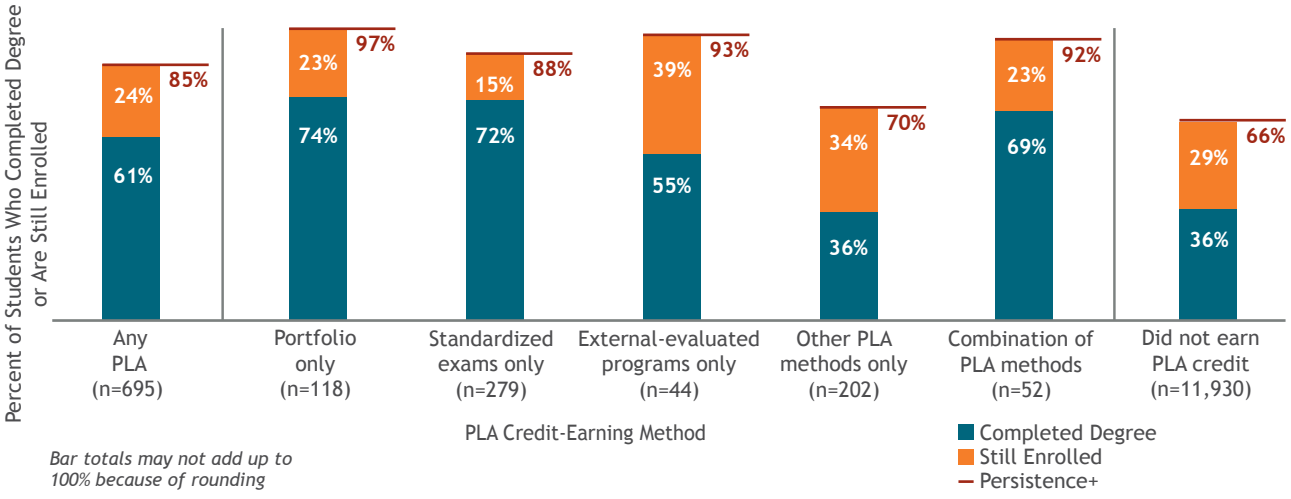
Figure 8b.
Persistence+ (Degree Completion or Continued Enrollment) by PLA Credit-Earning Method based on 3 Years or More Since Matriculation at Institution



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DOES THE METHOD OF EARNING PLA CREDIT MATTER?

The data suggest that certain methods of PLA — particularly portfolio assessment and standardized exams – are associated with better student outcomes like degree completion. However, there are likely other factors playing a role in these outcomes for which we were not able to control in this particular study.

The fact that PLA provides an alternative way to earn credit that saves time and money may be explanation enough for why PLA students have higher degree completion rates, on average. There may also be some motivational aspect as well, with PLA proving or validating that the student's life experience has value in higher education and sending the message that the student can learn — and, in fact, already has learned — at the college level.

But why might specific PLA methods be correlated with higher rates of degree completion?

One possible explanation is a cognitive one: that methods like portfolio assessment and standardized exams both require the student to re-engage with what they have learned. They may need to review what they know in preparation for the CLEP test, or they spend considerable time reflecting on what they have learned in the portfolio development process. This re-engagement with learning could have residual positive effects on the students' overall engagement with their educational journey. Advocates have long argued that the exercise of reflecting on one's previous learning is a process that ultimately helps the student create new learning (Marienau, 2014).

Another explanation is selection bias: that PLA students are already more engaged and motivated to earn a postsecondary credential and this higher level of motivation and engagement is what causes these students to take advantage of PLA options in the first place (or, at some institutions, discover PLA options that are not clearly advertised). This may be particularly true for portfolio assessment, which often requires the student to prepare a detailed written narrative, with supporting documentation, of his or her prior learning. Many PLA practitioners have shared with CAEL that, in their experience, the pursuit of credit through portfolio assessment is often the choice of higher-performing students. In addition, PLA practitioners have expressed that in their experience, students who have less confidence in their writing abilities will prefer to take a class for credit rather than write a major paper for the portfolio assessment process.

For these reasons, we suggest exercising caution before concluding that some PLA methods might be better than others when it comes to student outcomes. Without accounting for a student's unique strengths, it is difficult to draw general conclusions as to what role a specific method of PLA may play. Additional research that can control for student motivation or writing ability is needed and would contribute meaningfully to this discussion.

Institutions carrying out studies of their own PLA students may be able to conduct this kind of in-depth research on the comparative value of the different PLA methods. However, they should also consider how each of the PLA methods are offered at their institutions and whether additional institutional context should be factored in the analysis. Some PLA methods might be paired with additional support from faculty, for example. Also, the timing of when PLA methods are used might be a factor. At some institutions certain methods of PLA may be used earlier in the student's educational program and others later – PLA credits earned early in a student's studies might have a greater chance of motivating that student to persist, compared to PLA credits earned later.

CONCLUSION

In this study of more than 26,000 adult students at four institutions, we found that adult students earning PLA credit had better academic outcomes in terms of degree completion and persistence. The results are consistent with earlier findings on the impact of PLA and student academic outcomes. Additionally, in this study, the students earning credit from specific PLA methods such as portfolio assessment and standardized exams had better outcomes compared to students using other methods. The findings could be explained by the theory that the level of a student's engagement with their past learning can create new forms of learning – and portfolio assessment and standardized exams are the two PLA methods that require students to do more of that kind of reflection on or re-engagement in their learning.

However, we stop short of concluding that those PLA methods are conclusively better or preferable. Not every PLA method is right for every student or for evaluating every type of prior learning, which is why CAEL encourages institutions to offer a range of methods and to make sure students know about these options early in their studies. In addition, we also recognize the limitations of our analysis to control for other contributing factors to student success such as student performance, motivation, and confidence in writing abilities.

In fact, different methods of earning PLA credit may also produce different outcomes due to factors such as timing in which the student earned PLA or how an institution supports each method.

While more research and studies are needed to understand the relationship between the method of PLA and adult student success, the data continue to suggest that PLA is a valuable tool for supporting the adult learner.

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